For the VERNONT FARMEN. That Sick Heifer.

I have consulted all whom I have seen

Mermont Enrmer

ROYAL CUMMINGS. ST. JOHNSBURY, VT.

C. HORACE HUBBARD, Agricultural Ed'r

P. O. Address, Springfield, Vt.

hanged cross section 4. As an inducement for entereilers to club, linguister and bring in other subarribers, boar copies are senter several deliars, or at the rate of \$1.75 per copy when four

Rates of Advertising. For me ar more inches a Rates of Advertising. For me ar more inches a Rates of Advertising.

Communications for the Agricultural Department show be addressed to the Agricultural Editor at Spotiagfield, Va. BOARD OF AGRICULTURE MEETINGS.

Barre, Tuesday and Wednesday, Dec. 25 and 25.
Cabot, Thursday and Friday, Dec. 30 and 31.
Irakburgh, Tuesday and Wednesday, Jan. 11 and 12.
Franklin, Thursday and Friday, Jan. 13 and 14.
Brandon, Monday and Tressday, January 17 and 18.
Gewell, Tuesday and Wednesday, Jan. 10 and 18.
Fayetterille, Tuesday and Wednesday, Feb. 3 and 26.
Pomfret, Thursday and Friday, Feb. 3 and 4.
Rochester, Tuesday and Wednesday, Feb. 3 and 9.
Chelesa, Thursday and Friday, Feb. 10 and 11.

We found many readers of the FARMER at Hinesburgh, and they spoke in terms of praise of all the departments of the paper, and think it is a little the best paper which circulates there.

H. Bardwell of Shelburne, Mass., has an ox to the lake shore. weighing 2700 lbs which is gaining two hundred pounds a week. What a buster

While there is eight or ten inches of snow in southerly Windsor county, with good sleighing, and thirty inches and all blocked up in parts of Caledonia, in Chittenden the wheeling is fine, and an occasional drift only reminds the traveller that it is winter. The temperature at the time of our visit was balmy and spring-like.

Another friend of the FARMER, Mr T. C. ness and mud to his farm home in Williston, Idol, and Gazelle (sold for \$26,000.) whence after a night of refreshing sleep and long before dawn we took our departure exhibiting good constitution and heavy for the early train.

At a meeting of the directors of the Ver-December 21, applications were received for the next fair from Brattleboro, Windsor and Burlington. President Merrill, James A. Shedd and S. G. Holyake were appointed a committee to locate the fair, with instructions to receive proposals until February 1, and to meet to decide on the location February 15. Mr R. Bradley declined the position of director, to which office he was elected, and F. Goodhue of Brattleboro was elected to fill

that nine hundred and ninety-nine out of a every time. How fortunate!

The meeting of the board of agriculture at Hinesburgh, December 22-23, was well attended by the farmers and citizens of that and surrounding towns. A report of the proceedings will appear, as usual, in the FARMER, and it is unnecessary to recite at this time the list of papers and addresses. The exercises were of a high order of merit. The board received efficient assistance from New Hampshire Board of Agriculture the other gentlemen appointed to participate in the work of the meeting. Several valuable papers were omitted and the interesting discussions abridged for want of time. The people in attendance, who filled the hall to its utmost seating capacity at most of the sessions, held on to the last moment, and lingered after the meetings broke up to talk over the subjects which had been under discussion. We found an intelligent community, who stand up manfully for farming, and are willing and eager for new light. The hospitality extended so cheerfully to the visitors from abroad, made our stay delightful, and we all departed hoping to be there

Mr H. A. Post of Hinesburg's, who took the editor of the FARMER into his pleasant home, and cared for him like a brother, although a village farmer, keeps forty cows besides considerable other stock. He sends milk to the cheese factory for some five month, and makes butter the balance of the season. He has improved his dairy by a cross of Ayrshire blood and thinks he gets a Buffum closed the exercises by general rehardy sow and a good milker. His stable is in the basement of his barn, on the sunny stick to the farm, raise better crops and betside, well ventillated and above freezing ter stock and give to farming the character in the soil would then be avoidable for plant temperature in the coldest weather. Ties it deserves. with stanchions. Mr Post gave us a suggestion in regard to stable floors-to bed them in clay, the sleepers of locust being sunk into, and the plank resting on the clay, By this method cold drafts under the floor are avoided, and the comfort of the cows greatly enhanced. This intelligent farmer believes in the grass crop in preference to all others, as a profitable one for farmers to raise, baving a large meadow which yields over two tons of hay to the acre on an avorage. Mr Post is working for the PARMER and we anticipate many new subscribers

Vermont at the centennial. Hon, William ests of the country. R. Sanford was elected chairman and Henry Clark secretary, when the opinion was expressed by all that Vermont should have the factory of Capt Gardner at McLean, has head quarters at the contennial, where Ver- the candor to say "from all the weight of monters could find each other and to give testimony adduced we are fully prepared to character to Vermont among her sister states admit that Capt Gardner's company make at the centennial. And the question arose fair, honest and palatable product, of which how the pecessary funds should be provided. they need not be wishamed." Hon M. S. Colburn maintained that there should be a special session of the Legislature to make an appropriation for the purpose, Others were of opinion that the necessary funds could be raised by subscription. Dr Goldsmith stated that although the time for applying for space had already expired. there would be room enough. A committee of five persons were chosen to act as executive committee and have charge of arousing the interests of the people and raising funds,

Dudley P. Hall, and Lawrence Brainard. L. S. Drew's Farm and Stock.

and the following were chosen as such com-

mittee : Goy Asahel Peck, chairman ; John

N. Baxter, Jacob Estey, Wm R. Sanford,

We had the pleasure, recently, of a visit to Lake Side Farm, the residence of L. S. Drew of South Burlington. Mr Drew owns 240 acres of land on the borders of Champlaie. From his elegant farm home, which commands a magnificent view of the lake The Springfield Republican says that W. and the Adirondacks, his land slopes down

Mr Drew believes in the value of blood. and practices what he preaches. His herd he will be when he is ready for the Centen- of Ayrshire cattle, now numbering nineteen, are quite well known to Vermonters through their frequent exhibition at the state fairs, where they have won a large number of first prizes. His pedigrees are all recorded in the herd book. He also has his own herd record kept in systematic way, showing the name, color, date of birth, pedigree (and produce of cows) and disposition of every animal, if sold. Mr D. breeds for milk, and has produced some fine milkers.

The stallion "Drew," one of Walkill chief's Naramore, whose communications appear in get, has a place on the farm, as well as sevour columns occasionally, very kindly gave eral young colts of choice blood; one being conveyance for Mr Fassett and ourself by Bismarck, he by Rysdick's Hambletofrom the Hinesburgh meeting through dark- nian, and full brother to Mr Backman's A flock of fifty pure bred Merino sheep

fleeces was not the least attraction. After dinner Mr Drew invited us to take a sext behind a fine stepping pair of colts, mont state agricultural society at Burlington, and gave us a twelve mile ride to Hinesburgh, where the Rev Mr Hibbard of Char-

"bright side of farming." A Happy Retort.

lotte rewarded him by

Rev Mr Hibbard of Charlotte gave a lee ture at the Hinesburgh meeting of the board on the "Bright Side of Farming," which abounded in sound suggestions and was enlivened by frequent hard hits and witty thrusts, all in such a pleasant vein that the victims Rev Mr Murray says it does not pay to gould not help joining in the merriment of raise colts in New England, unless they are the audience, who were kept in the happiworth at least \$500 apiece when five years est possible humor. In the questioning old. He does not state what proportion of which followed Mr. Fassett's talk on the those he raises pay for themselves at that selection of dairy cows, Mr Hibbard, who standard. It is a little bad to tell farmers is a practical farmer, as well as a clergyman, joined, inquiring especially in reference to thousand of the colts they raise to five years selecting and raising caives, to all of which old are produced at a dead loss of two or Mr F, gave direct answers. But this sunny three or even four bundred dollars each. tempered agricultural parson didn't seem to out the world for at least one hundred years, But so it is, according to this authority. be quite satisfied with the information he even if it were not renewed. The fact is, He imparts the valuable information that it got, and so he sought to get an answer is very easy to raise them worth from \$500 which would cover the whole ground by upwards, and make it a dead sure thing asking "what would you do in this matter if you was in my place?" Mr Fassett isstantly replied in his dry, quiet way. "If I was in your place I would preach." The roar of laughter which greeted this witty response was contageous, and kept breaking out in spots and spreading. When we parted from our clorical co-laborer in the thorny field of agricultural progress be hadn't got over laughing at the settler he had got.

The New Hampshire board held a meet ing at Charlestown, December 16th. In the morning Prof Dimond of the New Hampshire state agricultural college gave a very able address on the "Adulteration of Food." Prof Cressy of the Massachusetts agriculturat college gave an address on the "Diseases of Domestic Animals," which every farmer ought to hear. Mr Sanborn read a paper on "Manures and their Application," the suggestions of which, if heeded, would increase the wealth of the farmers of New Hampshire many millions.

In the afternoon John G. McKeen South Acworth read one of his sensible papers on "Poultry" and Dea Buffum gave a sound talk on "Nest Stock."

The evening session was opened by Mr Adams in a brief extempore discussion of "Poultry," followed by Mr Hubbard of the Vermont board with a paper enfitled "Can into a recommendation of charcoal as a ferwe Make Farming Remanerative ?"

Mr Adams then gave an eloquent address on "Farming in New Hampshire," when Dea marks and urgent appeals to the farmers to

The exercises were very interesting and the audiences expressed regret when they were closed. The attendance was fair-a good audience in the evening, though a levee spread its attractions in another hall in the

The Oleomargarine Cheese War.

It will be remembered that we characterized the onelaught by the American Grocer at very slight expense. and others on those writers who gave a fair report of the manufacture of eleomargarine

22, at the call of Dr G. Idemith, to essider thing that is necessarily discreditable to and we cheerfully accept criticism upon the the subject of a proper representation of themselves or dangerous to the dairy inter-

> The Grocer on learning all the facts in regard to the manufacture of these goods at another column.

Heavy Cattle.

Mr Nathan G. Pierce of Westminste

On the first of Docember I butchered oull which was two years old the fifth da of last May, which weighed as follows:

Hough Tallow. Or less than thirty per cent shrinkage. A correspondent at Franklin writes : I noticed in your paper a few weeks ago

statement of the weight of one or

calves which I think we can beat, Harrison Gates of Franklin slaughtered bull calf (grade durham) November 13, eight nonths old, which dressed 465 pounds When six months old he weighed alive 610 ounds. His food was sour milk twice a day ntil four months old and three times a day since. Was fed 100 pounds of middlings during August and September. After October 1, pumpkins took the place of milk once

The American Agriculturist.

This standard agricultural journal having nished its thirty-fourth year, announces that ts centennial year is to be its best. With n able corps of editors and writers among the ablest in the country, it offers attractions to the farmer whatever his department, which are hard to resist. For \$1,60 a year it furnishes 500 double pages of useful and interesting reading and 500 or 600 more of fine engravings. All of which may be had by addressing Orange Judd & Co, New York.

Charcoal as Manure.

Mr W. P. Brooks writes to the Scientific

Farmer as follows: A correspondent of the Vermont Farmer inquires, in the issue of October 15, if charcoal can be used to advantage as a fertilizer largely into the composition of all plants, it burned in some sort of a stove. would seem to be a simple thing to apply it to the soil in such a way that it can be utilized as a fertilizer. He then goes on to say that he can give no certain directions for doing it, and qualifies his first statement by remain in just the state in which it was applied. He mentious various other uses for chargoal; but these I do not propose to touch upon, but shall confine myself to

onsideration of its value as a manure. The idea that it may be a direct source of arbon, which may be appropriated by the plant, cannot be too severely condemned, for is a well authenticated fact that charcoal is almost unchanged by the operation of the natural influences brought to bear upon it in the soil. As well apply granitic rocks as a source of potash, as chargoal as a source of carbon. If the carbon of charcoal could be assimilated by plants, it would still be useless to apply it for the purpose of supplying this element, for there is an amount of the air in the form of earbonic acid, sufficient for the production of ordinary crops through however, that the decomposition of plants and animals, the respiration of the latter and mbastion are continually replacing the earbon used by vegetation, and hence to apply it in any from for plant-food is utterly

There are, however, other considerations to be thought of before deciding whether fertilizer. A few of these I will notice. It has a great power, when in a finely-divided state, of absorbing gases, fixing many times its own volume of some of them. Hence it may be useful as an absorbent of ammonia. either mixed with decomposing manure, or

The effect of charcoal on the physical confition of a heavy soil is decidedly beneficial, as it tends to make it lighter and more porus, thus putting it in such a condition that t can be acted on more readily by the air. Its color, also, renders it valuable for apdication to a cold, clayey soil, since, naking such a soil darker, it adds to its heat-absorbing power.
Notwithstanding these beneficial influen-

es, however, charcoal is not of sufficient ralue as a erop-producing agent to pay for s application, except in cases where it e procured and applied at a very small ex-

firmation by a scientific writer of our suggestions in regard to the use of charcoal as fertilizer. We are not aware, however, that what we said carried "the idea that it may be a direct source of carbon, which may be appropriated by the plant." On the conrary we supposed we were very guarded in the use of language that could be construed tilizer as a direct source of carbon, or indirectly, by the absorption of ammonianal gases; not going as far as Mr Brooks in the latter direction. The query arises in our mind whether the gases it might absorb from the atmosphere and from manure decomposing food, or whether these valuable gasses would be retained and consumed by a slow process of combustion, and we hinted as much. Mr Brooks seemed to assume that the gases so absorbd wouled be available as plant food,

We stated the well-known composition of the state was held at Rutland, December gaged in this manufacture are not doing a is such only as a busy farmer may pick up, promote growth. Therefore is it not better guano; plot 18, wood ashes; plot 22, farm- rino sheep are kept. If he prespers, the old Westford, December 5.

subject so far as the same will hang together . Since writing the above we have a communication on the subject to be found in

For the VERMONT PARKER. Economy in Fuel.

For many years after the first settleme of Vermont this was a subject that received but little attention. Wood was everywhere so abundant that the farmer gave more thought to the easiest way to rid himself of a superabundance than to any economy in its

This course having been once adopted was not easy to change it, and land was cleared in many places that ought to have been kept for permanent wood lots. The introduction of railroads has caused an immease increase in the consumption of lumber and fuel, so that at the present time the consideration.

Undoubtedly more attention onght to be given to the growth and preservation of forests in order to provide against future wants, but I wish now to call attention to several ways in which there is great waste in the use of fuel, and the best modes of preventing it. This point needs no argument, as it is admithave much of a woodpile cut up beforehand, as his "women folks" would be more careful and not burn balf as much as they would | him. if there was a big pile to go to. But I imagine that it will be some time before all our snug Green Mountain farmers, and especially their wives, will be converted to this kind of

There are, however, many farmers even Verment whose supply of dry wood gives out earlier or later in the winter, and they are obliged to burn more or less green wood. But I think there has been quite an improvement in this direction of late years, caused mainly by the introduction of horse power machines for sawing wood. Farmers are more apt to get good sized wood piles and have them all cut up and drying at once than they were when the ax was the sole reliance. But this is not the only way in which these machines have proved economi-

cal. They save what used to be lost in chips. And tough, knotty logs that could not well be worked up with the ax, are util upon the farm. The substance of the editor's | ized by sawing short, as there will then be reply to the question was, that as charcoal is but few chunks that cannot be reduced to impure form of carbon, which enters dimensions small enough so that they may be grain per cow \$10.50, and probably not half ten years understanding these simple axioms it operated just as recommended, eradicating

dry. The best way is to pile wood, as soon as split, under an open shed. A sinadding that he is not sure that it would not gle roof allowing free circulation of air on all sides is as good as any.

> cared for and one split up in winter and allowed to lie exposed to sun and storm till the next fall or winter he will be surprised at the

If the woodshed is a tight one it may be best to pile the wood outside for a while, till it is partially seasoned, but the danger to be avoided will usually be found in letting it stay out too long, rather than in putting it

in too soon. Another loss is from unsuitable stoves, o from having stove pipes improperly arranged, and still another from wood unsuitable in size for the purpose it is used for. These may be considered together. Wood to be used for cooking purposes, especially in summer, should for the most part be split quite fine, so that it will both kindle and burn out quickly, and a fire may be had when it is wanted; but for the warming of dwellings or shops the reverse is true. Sometimes when the stovepipe is short, and the stove draws well, and fine dry wood is used, much of the heat goes up chimney and is lost. Such cases are the only possible ones which furnish any argument for the economy of burning green wood, as a mixture of this will prevent it from burning out so fast, but it is much better to have coarse, dry wood, and with the soapstone stove or any box stove that has a cover that can be raised nearly all the tough knots that cannot be split can be used, making, with proper care of the drafts, a steady, durable fire, that may be kept all night if desirable.

Sometimes a saving in heat can be effected by the use of longer stove pipes, and I can have noticed within a few years that sheet iron heaters have been introduced into stores and shops. They are usually placed upon the top or at the back end of the stove, though I think they might be located in a room above; the smoke and heat pass through by a tortuous course so that much of the latter is retained.

To sum the matter up in a few words I may say :

Never let wood that is dry get wet again

Let the wood be prepared with reference the use for which it is intended, and have stoves and pipes properly arranged. Waitsfield, December, 1875. E. A. F.

For the VERMONY PARKET Feeding Meal to Saye Hay.

to feed straw to matured stock and feed the yard manure. On the 6th of June the land sheep breeders of Vermont will have to look kay to growing stock?

lowed it up till the pasture furnished suffi- fertilized plot, there remain 800 pounds that I trust this farm will be kept and worked her killed. Her liver and gall were as per-

and cutting only about four tons, by esti- opinion. mate, and a dairy of twenty-five cows and teams. I had, however, the straw of nine eight plots in the 22 yielded less than the acres of oats, cut before they were in the charcoal plot. Among these are those treateconomical use of fuel is important for our milk, to save them from the grasshopper; ed with wood ashes, gypsum, quick lime and trimmed the leaves off from, but, not relish- ano and bone dust gave the largest return. ing the beards, the wheat was allowed to mature, and a little other coarse fodder. Other farmers were as bad off as I was I tell you it was dark times for farmers, as we could not sell cows for anything like their value. For instance, the best offer I could ted by nearly all. A Western friend of get for the best one of six cows I offered to for their stings, the birds, auts, waspa and nine claimed that it was economical not to sell was \$11, the buyer claiming that it was other enemies would prey upon them and to accommodate me that he made the offer, their stores until doubtless, the race would

> straw in the manger, it being tight. I have harmless as flies. always been sorry I did not weigh the straw | Bees, when filled with honey a top of hav and straw.

Bridport, December, 1875. matured stock, instead of growing stock, is are not unfrequently seen at our agricultural put in, it buried some of it out of sight. has visited parties who practice steaming sound. That straw is of great value as food fairs, in the midst of a crowd of gaping rusfor animals is equally true. When cut ties, expatiating upon the merits of their new to begin its use soon enough, and we incline process as conducted by Bela J. Stone of early and cured bright, and accompanied by "patent, double, compound, back-acting, rever- to try it more thoroughly another season. Westboro, Wm T. Merrifield and L. F. Ban-If one will note carefully the difference in a small ration of grain, stock will winter sible, house-warming, surplus-getting, movaheating power between a cord of wood thus well on it. Linsced meal is especially adapted ble comb bee hive." "Farm rights five corn and potatoes, report to us that it did John Dimon of Pomfret, Conn., and thus to this use, as it abounds in nitrogen, which dollars." But I am digressing. the straw lacks, as stated in an abstract from

Prof Atwater some months since.

For the Vanmont Pannes. Charcoal; Its Properties and Uses.

and oxygen and hydrogen gases, with a lit-

cess of air, as in pits, the result is very dif- smoke. ferent. The water is expelled; but the carbon remains and is familiarly known as charcoal. This may now be submitted to the ost intense heat without change, provided oxygen be excluded. But if heated in open air it burns up, unites with the oxygen of also the inorganic matter.

new, is very great. It then takes up 90 James Mead first settled in the town of which reach and turn up every inch of soil. times its bulk of ammoniacal gas; 74 times Rutland in 1769. He and his wife were We believe in the use of horse power in its bulk of hydrogen. Its absorbing power the first white people that settled in Rut- hoeing as well as in other farm work, and provement in the care and management of is greatest in that made of the most solid land. The farm has been in possession of shall be glad to have our readers give acwood, and diminishes when reduced to pow- the Mend family ever since, and is now oc- counts of their own actual experience.

can be made very servicable about buildings that have lived on this farm. where slops are thrown; in the privy and At the time of the battle of Hubbardston advantage of growing crops. It is itself an before and one behind her on the horse. element of every plant, and when its disin- The farm contains 220 acres. The stock Knowing that I must buy hay or meal, I tegration is effected it must be of value to kept last winter was 17 head of cattle, 160 chose the meal. I commenced, the last of the soil. But whether this will occur in a Merino sheep and three horses. John H. January, to feed two quarts a day per cow, cut one cod with a slope, hunt the borer's generation, the writer is not able to say. Its Mead, now about 27 years of age, began to in place of noon feed of hay, saving one- hole, clean it out at the entrance with a wire, disintegration is certainly very slow; hence breed Merino sheep when about ten years of third of hay, and watching closely for the place the bevelled end of my tube against it, In the Fanner of December 3 "S," asks the importance of its reduction to small age and has kept at it ever since. He has result. I soon became satisfied that my

in feeding meal, I will give him, through a very interesting experiment with 22 differ- have taken several premiums, both at the About the first of Murch I increased the your columns, the results of part of the same, ent fertilizers, and among this number was county and state fairs. The flock average meal to four quarts, lessening the hay by so it goes up or down, the suds in the tube will If they are, it would seem that charcoal for I am satisfied that it pays well to feed a charcoal reduced to powder. The land is ten pounds, unwashed, and rams have sheared much, finding, by weighing hay and meal, would be of immense value to spread upon little meal to stock, especially dairy stock, described as a "light loam, loose in texture, as high as 30 pounds, and ewes 174 pounds. that meal was the cheaper food. I have no land to absord ammonia from the air. And The usual practice with farmers is to feed hard, full of small stones, and as nearly as The flock show good constitution and good doubt they would have eaten nearly, or anything that will make it water tight will yet he says it is not of sufficient value to all their coarse fodder to young and growing possible of the same quality." The land breeding. The sheep stables are very con- quite, as much kay, had it been given them. pay for its application except when applied stock; hence in the spring they are not as was divided off into 28 plots, and each was venient with the exception that the water My object was to save hay. Now for the heavy as in the fall, having lost more in treated with a different fertilizer, except the does not come into the stable, but into the results. flesh than they have gained in growth of last, which received nothing. Plot 1 re- yards. Wood cuts of celebrated Merino I never had my cows do better on coming and absorptive power of charcoal, and asked frame. Thus we have lost half a year's ceived night soil and peat mixed; plot 3, rams and ewes are plenty, the walls of the in, or make more butter during the spring obcose as husty and uncalled for. The Gro- for information of others possessing a knowl- growth; therefore we have but a small return sulphate of ammonia, quick lime and soot; sheep stables being well lined with them. and on going out to pasture. But for milch cur and some others begin to see their mis- edge of chemistry or practical knowledge of for the fodder, as the straw does not contain plot 6, wood charcoal at the rate of 50 Mr Mend has made sales of sheep to go to cows should mix with meal an equal quan-A meeting of citizens of various sections take and are free to admit that parties on the subject. Our knowledge of chemistry nutriment enough to sustain vitality and bushels per imperial acre; plot 13, natural nearly every state in the Union where Me-

was all sown with Swedish turning, and No- out or he will be at the head. My practice was, when keeping duiry, to vember the 25th the crop was gathered with Everything on the farm looked well, and feed my cows, when foddering commenced in the following result in pounds per imperial appeared to have good care. For example, about my heifer, ever since she was taken the fall, the wheat straw with meal while acre: Plot 1, 4800; plet 3, 4320; plot 6, one of their cats weight only 17 pounds, and sick, and all said it was some trouble with giving milk; then on out straw without (the charcoal plot,) 4240; plot 13, 6560; measures three feet from tip of nose to tip of the gall and liver. I dectored for it all the meal and dry them off; then on late cut hag, plot 18, 3600; plot 22, 5200; plot 23, tail. There is a good sugar orehard on the time, and still she grew worse, until I thought and by the time they began to make bag in (tant received nothing,) 3440. Deducting place, and from 1,500 to 1,800 pounds of she could never get well; and, as she did spring, began again to feed meal, and fol. the number of pounds produced by the non-sugar a year are made.

trouble with my cows doing "bad," they of charcoal. Whether these 800 pourds in Vermont. [Then John H. must think of fix was her third stomach, which was so always being in good condition in the spring. were produced mainly by the charcoal itself, of other farm stock than sheep.] Such cases decayed that it would tear like a piece of I will give "S." another result of feeding or whether by the absorption of gaseous sub- are very rare. We do not stay long enough in wet, brown paper, and all the food in it was grain to save hay, of which I know without stances in the atmosphere, and their delivery a place to make a home. The average Yanguessing." The winter of '60-'61, succeed- to the plants on demand, the charcoal did kee buys a farm, "skins it," sells it for what The folds of the stomach, and the stomach, ing the grasshopper season, I of course was not act most effectually, may, perhaps, be it will bring, buys another and puts it short of fodder, having no old hay on hand questionable. I am inclined to the latter through the same process.

An examination of the plots shows also some wheat straw the grasshoppers bone dust. In this experiment natural gu-Wilmington, Vt.

FOR the VERMONT PARMER.

Many persons are deterred from keeping bees from the fear of stings; yet were it not I did not however take it to accommodate soon become extinet. But the command given to man to "have dominion over the After a good deal of figuring, I concluded fowl of the air, the fish of the sea," etc. that, grain being so cheap, I would winter applies not less to the industrious but vindictthem at home rather than drive them off and live bee than to the beasts of the field. The hire them wintered, as some did. I bought will horse of the plains, by a little skillful western corn at 70 cents, and Canada oats management, becomes docile and tractable, for 32 cents per bushel, from boats. I mixed and the clophant, that mighty giant of the Can hard hand hoeing be dispersed with by cows with out straw, three times a day, all two bushels of corn with one of oats and had eastern jungles, soon becomes the most obeit ground. I fed about three pints of the dient servant of man. And so may that meal to each cow, night and morning, with a instinct given to bees to defend their stores little straw, by putting the meal dry on the be easily overcome and they become as to have what we have learned in that hard

given at each feeding, but there was but oughly frightened, seem to lose all disposition wide experience in the use of different culti- weeks. I never had my cows do better; little, as they would eat meal and straw so to sting, and become harmless and tractable. vators and harrows for superseding hand considered it equal to good hay. clean while I was at breakfast that their Shutting the entrance of the hive and rapping mangers looked as if just scoured. A gaunter upon it for a few moments, or blowing a ject from our own positive knowledge. To looking lot of cows than they were I never little smoke into the entrance before they start at the beginning in answering the above. This winter I am feeding twentysaw, but they seemed to feel well, and they are disturbed, will frighten them, when they questions we must admit that we have never handled better than they looked, so I kept will at once fill themselves with honey, and used any machine or implement operated by them on that ration till towards spring, when any necessary operation with the hive can horse power which on the rough, stony land I increased the meal. They came through be performed with very little danger. Of of our farm did actually supersede the hand bran, as the manure from bran is worth the spring all right, and never did better course there are some colonies that it takes hoe. We used the Thomas harrow last seathan they did the season following. Cost of more time and care to subdue. A child of son, and where used according to directions T. BAILEY. can, with a little experience, handle bees the weeds without apparent injury to the nearly or quite as well as one of those poin. corn. Where the corn was suffered to grow pous, puffing, "professional bee tamers" who Different kinds of smoke affect bees differ- the former.

ently. There are none of us who do not winter mature cattle by the usual method.] to affect bees as alcohol affects man, although as good as that from cotton rags, or rotten be required to finish up the bills. wood or punk. No lover of bees loves to We have never used or seen the Ross Wood, from which charcoal is manufac- see them staggering about from its effects. tured, consists of three elements: Carbon, Puff ball smoke is sometimes used, affecting the bees as chloroform does larger both ways, and the cultivation is seasonable. tle inorganic matter remaining after combus- creatures. They seem to recover from the thorough and frequent, the hand lation in the form of ashes. Hence, though effect of it if sufficient air is given them, bor is greatly abridged. It is our the hydrogen is in excess when compared This kind of smoke is useful in uniting colo- opinion. however, that the with the formula representing water, wood nies in summer. They should be kept confined of heeing is less if the corn is after all our investigations of this subject, is may, for convenience, be represented by car- for a little time after they come to, as they planted with a planter, for the reason that, if one has considerable quantities of bon and water. When wool is burned in seem bewildered and are apt to fly away that the seed is distributed in a line in the the open air, or where the air has free access never to return. For ordinary use I find hill, and the cultivator may be run very to it, the water is set at liberty and passes wood decayed sufficiently to hold fire (maple close to the rows. The yield of corn is inoff into the atmosphere in the form of vapor | wood is best) the most desirable. In case a | creased by planting with a cultivator as it is | gard to quality, and if the number of cows and subsequently falls to the earth in rain, colony is very hard to subdue or in the fall in some sense drilled, the seed being seat- kept is large, say twenty or more, and one snow and dew. The carbon unites with the of the year or in cold weather a few stalks | tered along in the hills, each stock having oxygen of the air, forming carbonic acid gas, of wormwood with the leaves on may be more room to grow and develop than when rises and becomes diffused through the at- preferable and more effective. One may al- they are all in a cluster as is common with mosphere to be again absorbed by the leaves | ways know after a little experience when it | hand planted corn.

The Mead Farm.

While attending a meeting of the state tience of a man and tear up his corn. board of agriculture at West Rutland, Nothe atmosphere as in the former case, leaving to stay over night with the Alcads And ning deep, and taking overything before it. The absorbing power of charcoal, when has been owned by a Mead ever since Col shallow, to have a larger number of teeth, cupied by Abner J. and his son John H. By its great power of absorption charcoal Mead. The latter is the fifth generation

all places where noxious, offensive vapors Col Mead's wife caught a stallion the men arise to endanger health and comfort. And could not catch, and put on an old-fashioned save a ton of hay," I thought I would say by thus taking up ammoniacal and other pillion, and rode him to Bennington in one a word, or give a bit of my experience. gases it may be applied to the soil to the day, earrying one child in her arms, and one Three years ago I was short of hay, and could see daylight through it to kill a single

some questions in regard to saving hay by pieces or powder before application.

In 1842 Mr. Floming, Englishman, made very successful as a breeder. His flocks than when having the noon feed of hay. a natiural liking for Merinos, and has been cows were doing quite as well, if not better,

cient feed. By that practice I had no must have been produced by the application by a Mead as long as any farming is done feet as any creature's; all we could find out

Every generation could make improvements, if so, what it was, and I will be greatly set out trees, that when one hundred years obliged, and it may be a help to others. old would be worth as many dollars. Shade trees are worth earing for ; I have heard many men remark that they would give a hundred dollars if they had such an elm as some of their more fortunate neighbors had. On being asked why they did not set out one excessive eating or drinking; and it may have that answered, it takes too long for them to grow and my boys will never make farmers. Mr Mead has a glorious future before him, is never safe to use medicine much at ranand I predict he will make his mark yet.

JOHN G. McKEEN. South Accorth, N. H.

For the VERNOST PARNER. Horse Power for Hoeing.

EDITOR VERMONT FARMER :- Have you had experience with different cultivators. horse hoes and Thomas' Smoothing Harrow, to know how they work on our rough lands? their use?

Our correspondent asks for the result of our experience, and evidently does not care school mixed with mere theories of our own or others' on the subject. We have not had hoeing, and can say but little upon the sub-

We have used the horse hoe made by E. Such experiments as the above suggest the remember the effect of the sulphur smoke D. & O. E. Reynolds, Brockton, Mass., for inquiry whether it does not cost too much to used by our fathers. Tobacco smoke seems hilling potatoes after running through a common cultivator, at a great saving of hand many use it still. I believe it is not near labor. But the use of the hoe was found to

horse hoe in operation. When corn is planted in straight rows

is sale to handle bees by a peculiar subdued. There is a great difference in cultivators. humming they make after being treated to A long frame is preferable, as it runs more steadily, and can be guided up close to the hills without uprooting the corn. A and raw, rather than incur the expense and short cultivator which is "wabbling " one extra labor necessary for steaming food. We way and the other is a thing to try the pa. also believe that many who have adopted

When witch grass abounds it is necessary vember 29 and 30, I was fortunate enough to have something that will uproot it, runone thing seems very unusual; the farm In other cases we prefer a cultivator to run

Comparative Value of Hay and Meal.

Seeing the question asked in the FARMER of December 3, if "ten bushels of corn would

had thirty cows and a span of horses, borer. My way of getting at this miserable

not eat or drink snything for ten days, I had itself, were all turned black, and decayed. I call it inflammation of the stomach. If What a difference it would make if farms that is not right, will some one tell me what could remain in the family, as this farm has. it was, and if there was any cure for it; and

> Yours truly, D. W. ROBERTS. West Hartford, Dec 10.

(It is possible that the strange condition of the stomach was the result of disease alone-inflammation, perhaps, occasioned by been occasioned by some poison taken with the food, or even by drugs administered. It

For the VERNORT PARKER. Hay in Place of Meal.

In your issue of December 3, I noticed a communication entitled "Saving Hay by Feeding Meal." I would say that, last winter, being short of hay I tried the experiment of feeding straw and bran. I commenced. the middle of December, feeding seventeen they would eat; and every night after feeding I put two quarts of hot water upon their straw in the manger, the water being salted, which was what the cows needed. I then sprinkled over three pounds of bran to each cow, and kept them upon that feed six

Now, if any one is short of hay, and has got straw, he can save his bay by feeding as five cows the same feed, except that I give two quarts of corn and oats, ground. If I had to buy my grain I should much prefer more than that from any other kind of feed.

ANDREW J. HOLLISTER North Montpelier, December 9.

Steaming Food for Cattle. The editor of the New England Farmer

almost all the work in the latter and all in states the conclusions at which he arrives

after careful study of the question. We have visited barns where steam was used and have found the floor flooded | water from leaky steam pipes, or worse yet by hay tea from the steam box, and where be covering boards and rafters were all coated with frost from the condensed steam that leaked from some portions of the apparatus. And we have seen cows fed on steamer food in stables so loose and open to the wintry weather that the feed would almost freeze before the cattle bad time to eat it. Feeding steamed food under such circumstances seems like beginning a job at the wrong end, like saving at the spigot and

wasting at the bung. The conclusion we are inclined to adont. coarse or inferior fodder to work up, and wishes to make up for its inferiority by the use of grain, and if the principal object is selling milk by measure, without special reexpects these conditions to exist several years, it will pay to purchase a good steam boiler and cook the feed for his cows : but if the number of animals is small, the quality of hay the very best, as when good grass is out fore it blossoms, and the object of feeding s anything but making milk for market, he had better make his stables as warm and com fortable as possible, and feed his hay whole steaming and have, at the same time, made their barns warm and comfortable by tighter covering, or by fire from the furnace, or by both, and have also warmed the water drunk by the cows, would find it not a little puzzling to decide just how much of the improvement in the condition of the animals, the increase in the amount of milk, and saving of fodder is due to steaming or cooking the food, and how much to the general imthe animals which usually accompanies the introduction of a steamer on the farm.

Putting the Soap-Suds to Them

A correspondent of the New York Tribune says he has "waited for some one to invent an easy way of killing the apple tree borer; but the chisel, mallet, knife and wire are ouly recommended, and in using them have had to cut a six inch apple tree until 'worm of the dust' is an easier one and more effectual. I cut a sumac or alder one foot, more or less, long, punch out the pith take some putty-like clay that I get in our spring branch, plaster it water-tight around the end next the troe, fill the tube with very strong soap-suds, and the thing is done. No matter how crooked the hole is, or whether years and have not failed once. Of course any kind of small hollow tube will do, and do to plaster it with."

By means of irrigation the sage brush plains of Nebraska produce grain, vegetables and fruit of mammoth proportions.

Three var loads of silk-worm eggs, worth 86,000,000, arrived in New York, recently. via San Francisco, in 30 days from Rong Kong, and are going to Italy and southers